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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)
	)
Promotion of Spectrum Efficient	)
Technologies on Certain Part 90 Frequencies	)

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JUN 19 1998

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Commission

PETITION FOR RULEMAKING

Respectfully submitted,

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By: _____

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June 19, 1998

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The American Mobile Telecommunications Association, Inc. ("AMTA" or "Association"), in accordance with Section 1.401 of the Federal Communications Commission ("FCC" or "Commission") Rules and Regulations[1], respectfully requests the Commission to initiate a rulemaking proceeding to promote the more rapid deployment of spectrally efficient technologies on frequencies governed by Part 90 of the FCC Rules. Specifically, AMTA urges the Commission to adopt dates certain after which non Public-Safety licensees on certain Part 90 frequencies would be afforded only secondary status on their channels unless they have implemented equipment meeting the spectrum efficiency standards specified herein. In support thereof, the following is shown.

I. INTRODUCTION.

1. AMTA is a nationwide, non-profit trade association dedicated to the interests of the specialized wireless communications industry. The Association's members include trunked and conventional 800 MHz and 900 MHz operators, licensees of wide-area Specialized Mobile Radio ("SMR") systems, and commercial licensees in the 220 MHz and 450-512 MHz bands. These members provide commercial wireless services to millions of end user subscribers throughout the nation.

2. AMTA has consistently supported Commission efforts to promote the more efficient use of the limited spectrum resources practicably useable for the transmission of wireless communications. Its members were pioneers in the development and implementation of more costly, but technically more efficient, trunked land mobile technology a full two decades ago. The deployment of multi-frequency trunked commercial systems, first in the 800 MHz and then the 900 MHz bands, has been an unalloyed success story for the Commission and for the

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[1] 47 C.F.R. § 1.401.

customers served on those systems. Similar efforts are underway to make highly efficient, narrowband commercial systems at 220 MHz broadly available throughout the country. Even more recently, the Association's members have begun to invest in both centralized and decentralized trunked systems in the bands below 512 MHz in response to the Commission's "refarming" initiative.[2]

3. AMTA is confident that the public interest will be well served by the continued efforts of its members, as well as other users of spectrum, to enhance the spectrum efficiency of their operations. The Association further believes that those efforts will be impeded unless the Commission adopts more proactive provisions that ultimately will result in all non-Public Safety Part 90 licensees in the bands above 222 MHz and below 896 MHz making the election either to implement more advanced technologies or to accept secondary status on their frequencies within a reasonable time period.[3] As detailed more fully below, the Association's request is intended to reflect the needs of both commercial and private licensees on these bands and to recognize the differences in spectrum demands between urban and more rural areas.

II. THE CURRENT REGULATORY ENVIRONMENT DOES NOT ADEQUATELY PROMOTE THE DEPLOYMENT OF MORE EFFICIENT TECHNOLOGY IN THE PART 90 BANDS BETWEEN 222 MHz AND 896 MHz.

4. It is a central tenet of the Commission's current philosophy that, as a general matter, commercial providers of service, such as the Association's members, are inherently disposed to make efficient use of their spectrum since doing so typically results in increased

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[2] Second Report and Order, PR Docket No. 92-235, 12 FCC Rcd. 14307 (1997) ("2nd R&O").

[3] As described more fully below, the Association does not recommend application of the recommendations in the instant Petition to all Part 90 bands and services.

revenues.[4] AMTA agrees with that assessment with one fundamental caveat: a commercial licensee will invest in more efficient technology when it can derive the benefits of the resulting increased capacity. One need not look beyond the voluntary movement from analog to digital equipment in commercial wireless services such as ESMR, cellular and PCS to confirm that the marketplace will dictate when and where more efficient technology should be deployed if that criterion is satisfied.

5. Conversely, investment in improved technologies will be delayed and perhaps deterred entirely, if the party considering making the financial commitment cannot expect to enjoy the economic rewards of doing so. That situation arises when commercial licensees operate on shared spectrum, frequencies on which no individual licensee(s) can claim exclusive use of the channel within a defined geographic area.[5] There is **no economic rationale** for an operator to deploy more spectrally efficient equipment when the additional capacity that would be made available by doing so will be available to co-channel licensees who have not made a comparable investment.

6. Moreover, the bands in question support the operations of a combination of commercial and non-commercial systems. A significant number of licensees on the Part 90

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[4] The multi-decade use of spectrally inefficient, technically antiquated 6 MHz bandwidth technology for the delivery of television signals is evidence that increased spectrum efficiency is not always perceived as likely to enhance operator profits.

[5] FCC Rule Section 90.173(a) provides that Part 90 channels below 470 MHz are available only on a shared basis; additional licensees may be authorized to operate on the frequency irrespective of its current level of usage within an area. 47 C.F.R. § 90.173(a). Recently-adopted FCC Rule Section 90.187 for the first time provides for non-shared use of frequencies in these bands, albeit under conditions generally considered by the industry as unnecessarily restrictive. 47 C.F.R. § 90.187.

channels use their spectrum to satisfy their internal communications requirements, and presumably to make their core businesses more profitable, not to generate revenue from the provision of a communications service directly. In recent years a number of such entities have elected to replace or supplement their internal radio systems with service provided by one of the burgeoning number of commercial wireless providers. Others have determined that their needs dictate that they continue to own and operate their own radio facilities.

7. AMTA does not dispute that there are individual communications requirements that demand the continued availability of private, internal systems. The most visible example of such systems are those operated by Public Safety entities. As noted previously, the instant proposal specifically excludes the operations of Public Safety licensees. There are other private entities, however, with comparably unique requirements. The Association recommends that the FCC continue to ensure that there is adequate spectrum available to satisfy those needs.

8. However, it is axiomatic that the business decisions of non-commercial licensees, and specifically the decision as to whether or not to invest in more efficient technology, are not governed by the same tenets that guide for-profit providers of communications services. To the extent private licensees are satisfied with the quality and quantity of communications derived from their current system, there is no incentive for them to buy new, more efficient equipment. Although not motivated to deter entry by additional users, there is no affirmative rationale for them to implement more efficient technology simply to make space for unknown, future licensees. And even those with an internal communications need that would justify more efficient frequency utilization face the same deterrent that discourages commercial operators:

it is not financially prudent to deploy more efficient technology without an expectation that the party doing so will reap the efficiency benefits.

9. The Commission has recognized that the current Part 90 environment may not provide adequate incentives to encourage a level of efficient spectrum usage expected to accommodate the future needs of the Part 90 licensee community.[6] It has received comments on a menu of "market-based incentives" to address this problem. However, while some of the approaches suggested may hold promise, the record developed in that proceeding reflects a variety of concerns, questions and objections registered by the Part 90 community in response to the Commission's proposals. As a result, the FCC's refarming initiative has produced few, if any, tangible spectrum efficiency gains, and there is no indication that a breakthrough in respect to such improvements is near. In AMTA's opinion, it is imperative that the FCC consider alternative approaches to ensuring the more efficient use of this spectrum.

III. THE FCC'S RULES SHOULD ENSURE A REASONABLE LEVEL OF SPECTRUM EFFICIENCY FOR ALL NON-PUBLIC SAFETY PART 90 LICENSEES.

10. There already is a commonality of opinion between the Part 90 licensee community and the Commission in regard to the need to increase the capacity available to existing and prospective users of this spectrum. The more difficult question is how to achieve that objective in light of the level of incumbency on existing Part 90 spectrum, the variety of

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[6] Report and Order and Further Notice of Proposed Rule Making, PR Docket No. 92-235, 10 FCC Rcd. 10076 ¶ 10 (1995) ("R&O and FNPRM"). AMTA also concurs with the Land Mobile Communications Council ("LMCC") that additional spectrum allocations will be needed to accommodate the longer-term requirements of Part 90 users. LMCC, Petition for Rulemaking, RM 92-267 (filed Apr. 22, 1998). The proposal herein is intended to promote the more efficient use of already-allocated spectrum in the nearer-term future.

types of licensees using the spectrum, and the need to facilitate as smooth a transition as possible to more efficient spectrum usage.

11. AMTA recommends the following regulatory framework as a reasonable balancing of these various interests:

- Except as provided below, all non-Public Safety Part 90 licensees in the bands between 222 MHz and 896 MHz should be required to implement technology that achieves a minimum of two times the capacity of current channelization, i.e., technology with the equivalent of one voice path per 12.5 kHz of spectrum, using a 25 kHz frequency, within the time frame specified herein, or accept secondary status on their channel(s).

- The date by which licensees would be required to make that election should be defined by the urban area rankings set out in FCC Rule Section 90.741 as follows:

  Markets 1 through 50 - 12/31/2003

  Markets 51 through 100 - 12/31/2008

  All other markets - 12/31/2020

- The 800 MHz Channel Blocks A-V[7] are subject to competitive bidding procedures and should be exempt from these requirements in light of the FCC's oft-repeated finding that it should be assumed that spectrum awarded by auction will be deployed in a spectrally efficient manner.

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[7] AMTA has requested reconsideration of the FCC's decision to auction the General Category frequencies in three fifty-channel blocks, identified currently as Blocks D-F. AMTA, Petition for Reconsideration of 2nd R&O, PR Docket No. 93-144 (filed Sept. 2, 1997). To the extent this spectrum remains subject to competitive bidding, it should be excluded from the instant proposal under whatever label it is identified by the Commission.

- Part 90 spectrum at 220 MHz and 900 MHz should be excluded from this proposal because of the channel bandwidth requirements already applicable to those bands. The 220 MHz channelization plan already provides for highly efficient 5 kHz bandwidth technology, while Part 90 licensees operating in the 900 MHz band must deploy 12.5 kHz bandwidth equipment. Thus, improved spectral efficiency is already the norm in these bands.

- Licensees that elect not to implement equipment capable of meeting the efficiency standard specified above would be afforded secondary, rather than primary, status on their channels and would be subject to whatever primary licensing provisions the FCC subsequently adopts for their frequencies.

12. In AMTA's opinion, the most critical ingredient missing from the Commission's refarming provisions is a date certain by which licensees must move to more efficient technologies. The Association agrees that regulatory "carrots" are preferable to "sticks" whenever possible. However, AMTA has concluded reluctantly that the type acceptance provisions intended to induce the migration to more efficient equipment[8] are not likely to have the desired effect, at least not in any reasonable timeframe or in any orderly, business-like fashion. Licensees with the economic incentives to migrate, either to enhance their commercial radio operations or to improve their internal communications capabilities, will be disinclined to do so under the current regulatory framework for the reasons described above. It would not be possible today for a licensee to proceed to deploy more spectrally efficient equipment with any assurance that it will prove economically, or even technically, advantageous to have done so.

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[8] R&O and FNPRM at ¶¶ 95-97, 102-103; and Memorandum Opinion and Order, PR Docket No. 92-235, 12 FCC Rcd. 17676 ¶ 46 (1996).

Without such confidence, only the under-informed or foolhardy are likely to pursue such a course.

13. By contrast, the Association believes that the framework proposed herein provides the certainty on which prudent business decisions should be premised without imposing unreasonable burdens on incumbent licensees. First, AMTA is recommending an efficiency level that is achievable and affordable today, not an untested or cost-prohibitive standard. Second, the Association is proposing a migration schedule that it considers conservative, particularly in light of the efficiency standard. Finally, the proposal permits licensees to decide what, if any, investment they are prepared to make to maintain primary status, an option that should prove particularly valuable in more rural areas where demand for spectrum is relatively limited. Collectively these provisions should be considered at least as "carrot-like" as they are "stick-like" for all but the most recalcitrant licensee. They constitute a modest, but in the Association's opinion, absolutely essential, proposal that can propel the Part 90 user community at least to the first way station on the road to optimal spectrum efficiency.

IV. CONCLUSION.

14. For the reasons detailed herein, AMTA requests that the Commission initiate a rulemaking to address the instant proposal at the earliest possible opportunity.

CERTIFICATE OF SERVICE

I, Linda J. Evans, a secretary in the law office of Lukas, Nace, Gutierrez & Sachs, hereby certify that I have, on this June 19, 1998, caused to be hand delivered a copy of the foregoing Petition for Rulemaking to the following:

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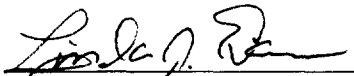

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*Via First-class Mail